

Thomas Jefferson National Accelerator Facility (TJNAF or Jefferson Lab)

Site Description: The Thomas Jefferson National Accelerator Facility—TJNAF, or Jefferson Lab—is located in Newport News, Virginia. Formerly known as the Continuous Electron Beam Accelerator Facility (CEBAF), Jefferson Lab is just east of Jefferson Avenue, less than one mile west of Interstate 64 and just north of Oyster Point Industrial Park.

Mission: Jefferson Lab's primary mission is to discover the fundamental quark structure of nuclear matter. For this purpose, it develops and operates the superconducting electron accelerator and specially designed modern particle detectors in collaboration with the scientific community.

Management: The lead program secretarial office for TJNAF is the U.S. Department of Energy (DOE) Office of Science (SC). The Office of High Energy and Nuclear Physics (SC-20) has responsibility for overall program planning and direction, funding, and evaluation. The Oak Ridge Operations Office, Assistant Manager for Laboratories, provides support for contract administration, management support, and assessment, and oversight. The Jefferson Lab DOE Site Office employs eight DOE personnel plus one Office of Science employee on a term assignment, who provide management direction to the Jefferson Lab through the management and operating contractor, Southeastern Universities Research Association (SURA). SURA has approximately 500 employees at TJNAF.

Budget: The annual budgets for FY 1999 and FY 2000 are approximately \$71 and \$74 million, respectively.

Integrated Safety Management (ISM) Implementation Status: During FY 1996, DOE authorized Jefferson Lab to conduct the "necessary and sufficient" standards process, now referred to as the Work Smart standards (WSS) process. The process was completed and an approved set of WSS was issued. A contract modification, incorporating by reference both the WSS set and a list of Administrative Laws and Regulations, was executed on September 9, 1996. Jefferson Lab submitted its ISM system (ISMS) Phase I Plan to DOE on April 28, 1998. In March 1999 an ISMS verification review team found no system failures or areas of concern and recommended approval of the Laboratory's ISMS Plan. The Oak Ridge Operations Office Manager approved the Laboratory's ISMS Plan on May 24, 1999. ISM Phase II verification is scheduled to be completed by December 1999.

Significant Events: An accident occurred on October 7, 1998, in Experimental Hall "C" when a survey tripod was drawn into the Hall C experimental target vacuum window, rupturing the window. Although no one was hurt and the dollar value of equipment damage was not extensive, the Jefferson Lab and the DOE Site Office agreed that an extensive internal investigation of the incident was appropriate. Several problems were noted, including "less than adequate" management oversight. On November 12, 1998, after another review, the Associate Director for Physics canceled the remainder of the experiment and began the implementation of appropriate improvements in safety, communications, and review procedures. All eight corrective actions associated with the event have been completed. The details of this accident can be found in occurrence report ORO-SURA-TJNAF-1998-0004.

Key Facilities

Facility Name	Mission/Status	Principal Hazards
Thomas Jefferson National Accelerator Facility (TJNAF or Jefferson Lab)	Perform research to discover the fundamental nature of nuclear matter/Operational	General industrial (e.g., trips, falls, electrical); cryogenics; ionizing radiation

For the TJNAF ES&H Manager's Office, contact (757) 269-7139